

ENVIRONMENTAL SAMPLING FOR THE ECP WQARF SITES

Soil Vapor>Soil Vapor Screening Level



Soil gas sampling is used to locate areas in the neighborhood where contaminant vapors exist and have the potential to impact structures above the vapor. Most of the soil gas sampling is being done in public right of ways, driveways or common area within multifamily complexes. There may be some noise associated with the soil gas sampling as some of the rod are essentially hammered into the ground. Once a particular depth is reached with the rod, tubing will be used to access the gas present at that particular depth. Glass syringes will remove air from the tubing that may be in the tubing and possibly consist of outdoor ambient air. Once purging is done, the air that is removed from the tubing will consist of soil gas from the depth of the rod. The sample will be analyzed in a Arizona Dept. Of Health certified mobile lab that is near by.

For Units Available for Sampling, Collect Indoor Air Sample with Vapor-Tight Syringe, Analyze On-site & Collect 10% 24-hour Summa Samples for QA/QC



To screen the indoor air for the potential of vapor intrusion, gas tight glass syringes will be used to collect instantaneous grab samples. These samples will be delivered to a mobile laboratory that is near the site for analysis. Analysis consists of injecting a small amount of air from the syringe into an instrument and measuring the tetrachloroethene (PCE) and trichloroethene (TCE) concentrations.

Test/Look for Indoor Source if Allowed



When sampling indoor air for vapor intrusion, the chemicals usually being analyzed for are found in many common household products. Their use and storage in the home can make interpreting the results difficult. These chemicals should be removed from the home prior to sampling and the use of them should be refrained from.

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Technicians will spend more time in the structure going over the procedures and taking an inventory of the building as well as any products that may give confounding results. Actual sample time will be around one minute. If there are detections, the technician may return to take additional samples to see if there are background sources or to ensure the initial results were accurate.

Collect Summa Samples in Units Available for 24-hour Sampling



The canister will not make any noise, however it will be taking a continuous sample for 24 hours. Please do not tamper or disturb the sampler as it may result in an invalid result.

As a quality control check and to confirm a portion of samples, stainless steel evacuated canisters will be used to collect 24 hour composite indoor air samples and sent off to an off-site environmental laboratory.

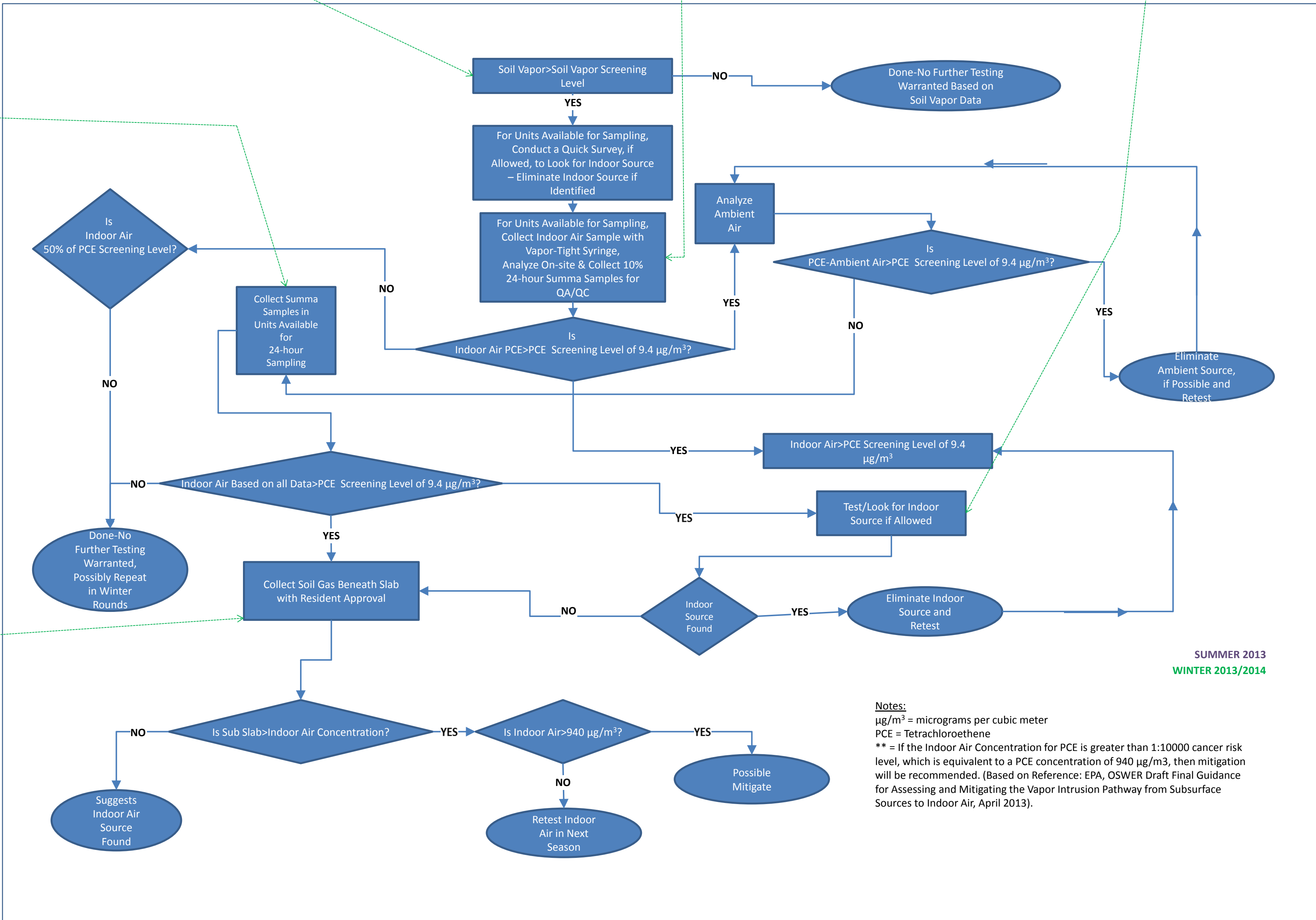
If you location is chosen for a 24 hr. composite sample, an adult will need to present not only at the time the sampler is set up, but also 24 hours later so the technician can retrieve the canister.

In the event that PCE or TCE is detected in the indoor syringe screening sample, it may be necessary to see if the chemical is below the building and this is done by collecting a sub-slab soil gas sample. Drilling a small hole through the slab into the soil below the building is done first. Then a tube is sealed into the hole and allowed to sit for about an hour to equilibrate. Once the sample port has been checked to make sure it does not leak to the indoor air, the sample can be collected.



Collect Soil Gas Beneath Slab with Resident Approval

If your location is chosen for a sub-slab sample, this will be done at a time that is convenient for the occupant as well as the sampling team. The process of obtaining a sub-slab sample takes just over an hour to complete. It is unlikely that more than one sub-slab sample will be necessary. These locations can be hidden under the carpet or in closets.



It is important to refrain from using any chemicals during the testing period, especially if a 24hr canister sample is being taken. The technicians that enter the structures are just trying to do their jobs and obtain a quality sample.

Results from the neighborhood study will be evaluated once all the data has been collected, reviewed and passed basic quality assurance parameters. The data will be provided to each person who's air was sampled approximately 6 weeks after the sampling is over.

If high results are encountered, it may be necessary to mitigate your structure, and this will be discussed with the building occupant / owner as soon as possible.